Article received on July 31st 2024
Article accepted on November 27th 2024

Original scientific paper

UDC 37.091.3::784.9
781.22:781.43

DOI: 10.5937/newso2464063B

Jelena Beočanin*
University of Kragujevac
Faculty of Philology and Arts
Department of Music Theory and Pedagogy

Marko Aleksić**
University of Arts in Belgrade
Faculty of Music
Department of Music Theory

FORMULATING A THEORETICAL BASIS FOR WORKING ON TRIADS SHARING THE SAME THIRD IN THE HIGHER EDUCATION CURRICULUM

Abstract: Relations between triads sharing the same third are rare within harmonic progressions and, due to their distinct sonority, they are fascinating to listen to and perform. They have received little attention in theoretical literature on music (partly due to their limited representation in the musical repertoire) and they are rarely mentioned in solfeggio literature. Regardless, they represent a significant element of musical expression that needs to be studied, theoretically established, and introduced into

* The author's contact details: jelena.beocanin@filum.kg.ac.rs.
** The author's contact details: marco77marco@gmail.com.

the teaching of solfeggio and harmony to a greater extent than is currently the case. Therefore, this paper focuses on triads sharing the same third (also known as *Terzgleicher*) employing analytical and descriptive methods. The analysis will encompass both Serbian and foreign textbook-theoretical literature in the field of solfeggio and solfeggio teaching, as well as in the field of harmony, in which the problem of these triads is discussed. This paper aims to establish a theoretical foundation for the future expansion of theoretical and analytical approaches and literature on solfeggio. This expansion would be dedicated to shared third relations, especially in the context of enhancing students' musical hearing.
Keywords: *Terzgleicher*, functionality, solfeggio, harmony, musical hearing

Introduction

In music theory, a relation between triads sharing the same third is formed between a major and a minor triad, and triads that enter into such a relation are called triads sharing the same third. Although they are not encountered as frequently as some other chord relations, these relations attract attention with their characteristic and specific sonority, either when they appear in artistic repertoire or when they are part of the solfeggio literature. However, a more detailed elaboration of this phenomenon seems deficient in the harmonic-theoretical literature, especially concerning solfeggio teaching methodology in Serbia. In foreign literature, one can sporadically come across chapters dedicated to triads sharing the same third. However, even in foreign literature, little is written about the aforementioned chords. More detailed theoretical explanations of triads sharing the same third can regularly be found in scientific articles dedicated to the work of a particular composer, while their complete and comprehensive theoretical presentation is almost always missing. Therefore, the intention of the authors of the present paper is to contribute to filling this theoretical as well as methodological 'gap', through a two-sided, interdisciplinary approach to the concept and phenomenon of triads sharing the same third – from the perspective of the science of harmony and solfeggio teaching methodology. Theoretical research on triads sharing the same third will thus be presented in two installments, i.e. two papers.[1] This paper will first examine the very concept of triads sharing the same third and present their fundamental features, with a proposal for a

[1] The plan is to publish the second paper in the next issue of this journal.

functional explanation of all possible relations between triads sharing the same third in a key. Furthermore, an overview and a critical review of the relevant teaching and theoretical literature for harmony and solfeggio which discusses the phenomenon of triads sharing the same third will be presented. The literature on harmony analyzed in this paper includes textbooks and articles on triads sharing the same third in German, American, Russian, and Serbian scientific literature on harmony. An overview of solfeggio and solfeggio teaching methodology includes Serbian and Russian literature. Two main goals will be set in the following paper. The first concerns suggestions for enriching solfeggio and harmony teaching by presenting methodological procedures for working on triads sharing the same third, with examples from artistic literature that contain these chord relations and various aspects of their analytical interpretation. The second goal is to develop the musical ear of students who are supposed to grow into professionals over time: composers, performers, and musicians in general.

The Concept and Basic Characteristics of Triad Sharing the Same Third Relations

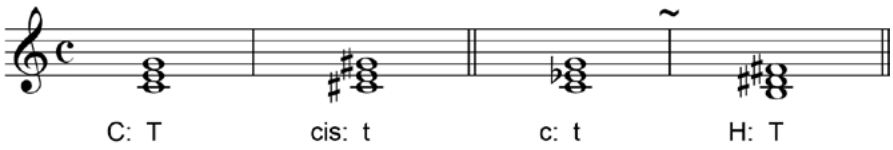
The German term *Terzgleicher* was first introduced into theoretical discourse by the German theorist Sigfried Karg-Elert (1877–1933),[2] although there were authors who had also explored this harmonic phenomenon earlier, which we will discuss later in the paper. Seventh chords can also be included in triads sharing the same third relation, but only those derived from major or minor triads. Such addition of a seventh to a basic triad does not practically affect the basic inter-chord relation. However, it should be underscored that in practice this is still rare and composers are mostly preoccupied with the sonority of the "original" shared third relation – the one that is formed between the triads.

The fundamental sound characteristics of this relation is striking and peculiar. It consists of a double chromatic movement between the roots and fifths of these triads while maintaining a shared tone – the third. This particular tone movement is not found in any other type of harmonic progres-

[2] Sigfried Karg-Elert was a German composer and music theorist. He mainly composed for organ and harmonium, as well as piano miniatures. He was a student and later a professor at the Leipzig Conservatory. He wrote several significant studies in the field of music theory and harmony, including the book *Logic of Harmony* in which he discusses the question of the polarity of major and minor.

sion, thus garnering attention with its distinct auditory effect. Viewed as potential tonic triads of their respective keys, the two triads sharing the same third stand in either the fourth or the eighth position of distance in the circle of fifths (Example 1).[3]

Example 1. Third-sharing triads in the fourth (tonic triads of C major and C sharp minor) and eighth fifth relation (tonic triads of C minor and A major, with enharmonic replacement of the shared third)

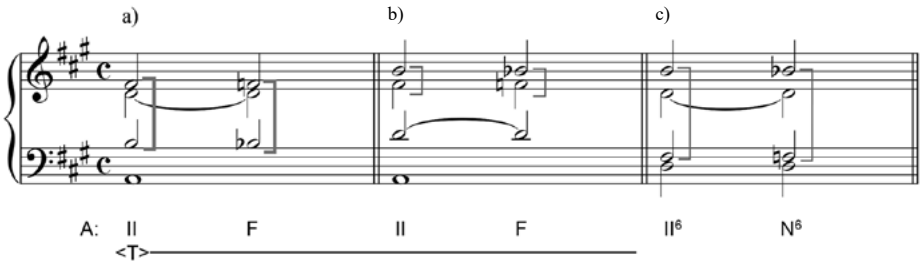


In this regard, triads sharing the same third are quite distant from each other, yet at the same time they are very near – both because of the interval relation of their roots and because of the sharing third – a paradox that has been extensively discussed in the theoretical literature.[4] If both triads are presented in the root position, it is implied that parallel perfect fifths motion (Example 2, a)) will appear in such a harmonic progression. This phenomenon may pose a challenge primarily within a strict choral texture, whereas its impact on instrumental and vocal-instrumental music is less pronounced. In the practice of composing, these parallel fifths are simply avoided by placing the fifth below the root note (Example 2, b)) or, alternatively, by using a sixth chord (less often a fifth-sixth chord) with the root note placed above the third of the sixth chord (Example 2, c)). In both cases (Example 2, b) and c)), instead of parallel fifths, parallel fourths will result, which are allowed. However, in the compositions from the late 19th century, and especially those from the 20th century, parallel fifths in relations with triads sharing the same third are noticeably more frequent. Irrespective of whether parallel fifths motion is avoided and parallel perfect fourths appear instead, the peculiar chord relation persists, exerting its effect.

[3] Although some theorists speak of connections between the tonic chord and the triad that shares the same third with it (see later), it should be noted that in practice, triads with the same third relations occur fairly rarely in the context of the tonic.

[4] Frank Lehman, "Schubert's SLIDEs: Tonal (Non-)Integration of a Paradoxical Transformation", *Music Theory & Analysis – International Journal of the Dutch-Flemish Society for Music Theory*, 1 (1 & 2), 2014, 73, http://dx.doi.org/10.11116/MTA.1.4, accessed on 14/2/2023.

Example 2. Relation of third-sharing triads in a strict four-part harmonic position – a) connection of two triads with the appearance of parallel fifths; b) relation of two triads with avoided parallel fifths (parallel fourths appear), c) relation of two sixth chords with avoided parallel fifths (parallel fourths appear)



In the *Terzgleicher* progression, in addition to this chromatic component, there is also an enharmonic component, embodied first in the enharmonic substitution of the third. In this respect, there is a rule: If the roots of two triads sharing the same third are distant by a chromatic half-step, the shared third is unchanged (C–E–G / C#–E–G#), and if their roots are a diatonic semitone apart, the shared third is spelled enharmonically (C-E-G / D♭-F♭-A♭). However, the enharmonic of the root and the fifth can also be included in the shared third relation. For example, for the triad C–E–G, the triads C#–E–G# and the enharmonic D♭–F♭–A♭ represent triads sharing the same third, whereby in the second triad there is an enharmonic substitution of the root, and the fifth (and not only the third) comparing to the enharmonic minor triad. This, as Yuri Holopov (1932–2003)[5] rightly warns, introduces us to "complex chromatic-enharmonic interval relationships" that will either "reorganize the internal structure of a key, depriving it of the stability of the strict functional organization of sounds and saturating it with now constant chromatic-enharmonic corrections" even more or they will move us so far away from the basic key that they become "comparable to the intensity

[5] Yuri Nikolayevich Kholopov was a Soviet and Russian musicologist and music theorist. He published about 800 papers, including 10 monographs. Since 1960, he was engaged at the Department of Music Theory of the Moscow Conservatory. The main areas of Kholopov's scientific research include the theory and history of harmony, the theory of musical form, and the history of musicology. His studies of harmony are particularly noteworthy, which have received wide public recognition which is why he is considered the creator of a new doctrine of harmony. Theoretical and practical harmony is now taught at Russian music universities according to his textbooks.

of foreign modulation".[6] This can justify the often theoretical and methodological identification of shared thirds between triads, on the one hand, and between keys, on the other. The more functionally foreign the triads are from each other, the more difficult it is to *hear* them within a single key, and therefore the more likely it is to perceive them as tonics of two distant keys. Somewhat more than it seems in Anglo-Saxon, Russian theoretical literature has paid attention to this shared third relation on a broader level, that is, between two keys.

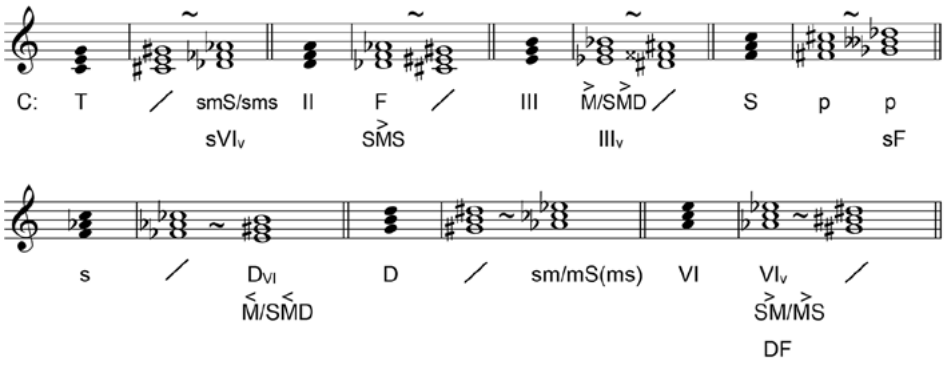
The general harmonic context in which the connection of the triads sharing the same third can appear in art music repertoire is often simplified. Apart from the fact that the chords participating in this relation are triads, it happens that in the narrower, and often the wider harmonic environment, it is the triads that prevail – diatonic or from the basic circle of the most frequently altered, secondary function chords. Such an environment is the ideal place to perceive and achieve the best sound impression for a specific chord relation, resulting in the best artistic outcome. Therefore, it is quite clear that in a harmonic environment in which complex and dissonant chords predominate, such a chord relation would be 'muffled', insufficiently articulated, and without adequate effect.

In a strictly compositional sense, shared third relations in art music can be traced in a two-part connection: (1) a direct shared third relationship between two triads and/or two keys and (2) a shared third relationship between two triads and/or two keys that are established at a distance. When two triads sharing the same third are directly connected, it creates the strongest effect and can be displayed in two ways – within the key and as part of the modulation process. A distance connection is established between two triads sharing the same third with one or two chords inserted between them, but on the condition that the inserted chords do not last long. This manifestation is rare because, without direct attachment, the effect of the *Terzgleicher* relationship diminishes. These forms also apply to the relationship between two keys, where true triads sharing the same third relations between keys are best perceived when these two keys follow one another, especially if their boundary triads are tonics. However, in practice, this boils down to the already described triad sharing the same third progression in the modulation process.

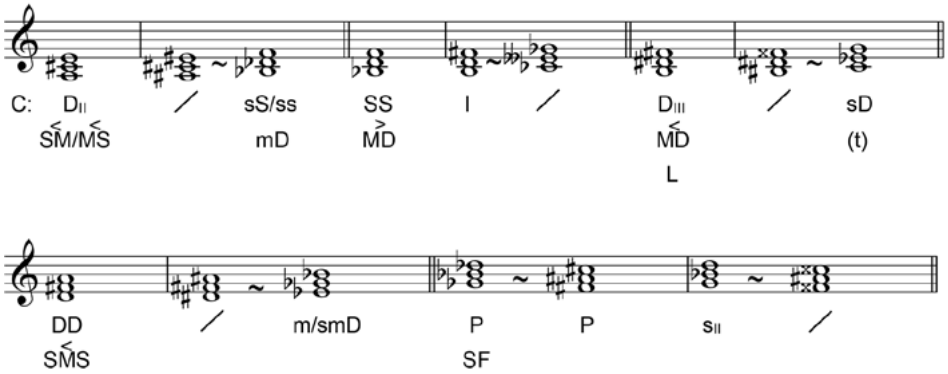
[6] Юрий Н. Холопов, *Гармония – теоретический курс. Учебник – издание второе, исправленное*, Санкт-Петербург – Москва – Краснодар, Лань – Планета музыки, 2003, 441.

It should be emphasized that in the tonal system and tonal harmony, there are no two diatonic chords that stand in a shared third relation, which means that one of the two chords must always be altered. Each diatonic triad theoretically has its equivalent, which is usually an altered triad (Examples 3 and 5). Likewise, a shared third relation can be formed between two altered triads in one key (Examples 4 and 6). In the latter case, the number of triads sharing the same third progressions is slightly smaller. In other words, each tone of the chromatic scale is a potential shared third of one major and one minor triad, and therefore there can be a total of 12 shared third relations in a single key. The following represents an overview of all possible equivalents of triad relations in major (C major) and minor (A minor), which include diatonic and altered consonant (major and minor) triads (Examples 3, 4, 5, and 6). As can be seen, all potential functions of altered chords that form triads sharing the same third relation with scale chords are presented, that is, all potential functions of two altered chords that form triads sharing the same third relation. For the most part, these are mediant chords, and then also secondary subdominants, for the simple reason that these chords appear almost exclusively as major and minor fifth chords, and not as seventh chords. Moreover, a certain number of triads sharing the same third also have the function of a secondary dominant, which is also given as a triad, and not as a seventh chord. However, this number of triads sharing the same third relations represents only a theoretical possibility, while in artistic practice a significantly smaller number of them are actually used.

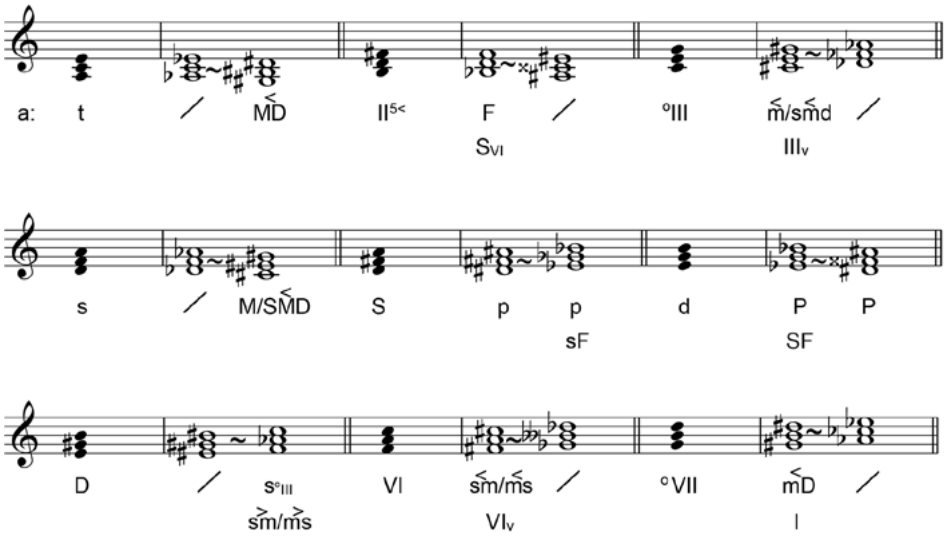
Example 3. *Terzgleicher* relations between diatonic and altered triads in C major



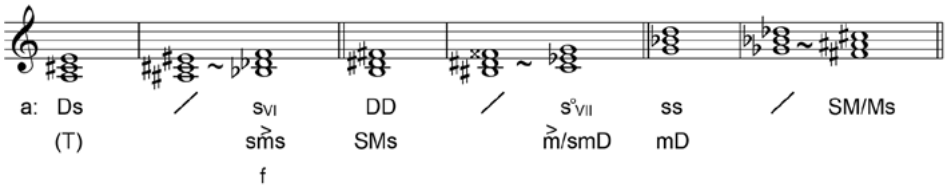
Example 4. *Terzgleicher* relations between two altered triads in C major



Example 5. *Terzgleicher* relations between diatonic and altered triads in A minor



Example 6. *Terzgleicher* relations between two altered triads in A minor



Terzgleicher in the Harmonic-Analytical Literature

An overview and critical review of the harmonic-analytical literature devoted to triad sharing the same third and triad sharing the same third relations begins with German authors. The reason for this is not only the fact that this issue was historically first considered by German authors, but also that the scientific work of Hugo Riemann (1849–1919),[7] witnessed primarily through the activities of members of the neo-Riemannian school, had a far-reaching influence on the creation of new approaches to the study of these chords. Since the neo-Riemannian school is largely composed of American theorists, the literature overview will continue with a review of the work of American scholars, members of the neo-Riemannian school, who investigated triads sharing the same third. This is followed by a review of the literature devoted to these chords by Russian music theorists, such as Leo Mazelj (1907–2000)[8] and Yuri Kholopov. The chapter will conclude with a discussion of triads sharing the same third in Serbian university literature on harmony, dealt with to a significant extent only by Dejan Despić.

Interpretation of Terzgleicher *in German literature*

In German music theory, the question of triad sharing the same third is considered primarily from the perspective of transformational logic. According to transformational logic, the triad sharing the same third relation is not explained through a direct connection of two triads, but indirectly, by connecting several different chords with which the triad sharing the same third relation is ultimately reached. Hugo Riemann and theorists belonging to the neo-Riemannian school view this transformation of triads in the process of reaching triad sharing the same third through the "system of harmonic steps"

[7] Hugo Riemann was a German composer, musicologist, and one of the most influential music theorists of the 19th and early 20th centuries. He wrote more than 60 books and over 200 individual studies. In them, he presented numerous details that permanently enriched the science of music, which are still in use today. Among them, the renewal of the interpretation of harmonic phenomena on the basis of functional theory is worth highlighting, as well as the understanding of secondary degrees as substitutes for the three main functions of tonality, and others. He built a systematic musical analysis and the science of composition, as well as new principles of phrasing and agogics.

[8] Leo Mazel was a Soviet and Russian musicologist and music theorist. He is the author of numerous papers in the fields of musical styles, harmony, musical forms, musical syntax, melody, rhythm, musical aesthetics, as well as the methodology of musical analysis.

(*Harmonieschritte*),[9] specific to Riemann's theory, which is based on major third motions.[10] For example, from the initial major triad (C–E–G) the ascending motion in major thirds begins and two chromatic mediant relationship triads are reached (first E–G#–H and then G#–H#–D#). Finally, third motion is substituted with fourth motion and the last triad in the row represents the minor subdominant of the previous triad (C#–E–G#). In this way, triads sharing the same third relation (C–E–G and C#–E–G#) is formed between the first and last chords in the sequence.

In the works of two other German theorists, Karg-Elert and Arnold Schoenberg (1874–1951), the chromatic mediant relationships between the triads are central to the trajectory leading to the triad sharing the same third. In his book *Structural Functions of Harmony* (1969),[11] a globally influential harmony textbook, Schoenberg cites a "map of regions". It is, more precisely, a map of tonal regions, which he used to interpret the general tonal system.[12] It is with the help of this "map" that a shared third relation occurs.

Interpretation of Terzgleicher *in American literature (neo-Riemannian school)*

Since mediant relationships appear in all these transformations or trajectories, Frank Lehman,[13] a contemporary music theorist who has studied the

[9] The theory of Hugo Riemann and the neo-Riemannian theory, which includes the works of David Lewin (1933–2003), Brian Hyer, Richard Cohn and others, is based on a "dualistic" system of triad connections (meaning the inverse correspondence of the two basic triads, the major and minor quintic chords, derived from the fact that the minor triad is understood as a major, but if read from above downwards). Riemann proposed the use of a system of transformations between triads, within which they are connected to each other directly, regardless of their relationship to the scale tonic.

[10] Cf. Nora Engebretsen, "Neo-Riemannian Perspectives on the *Harmonieschritte*, with a Translation of Riemann's *Systematik der Harmonieschritte*", in: Edward Gollin and Alexander Rehding (Eds.), *The Oxford Handbook of Neo-Riemannian Music Theories*, New York, Oxford University Press, 2011, 362, 368–370, 376. Frank Lehman, op. cit., 74–75.

[11] Apart from being a composer, Schoenberg is also remembered for his writings and works in the field of music theory and harmony. In addition to the aforementioned textbook, he also wrote books *Der Musikalische Gedanke und die Logik, Technik und Kunst seiner Darstellung* (1936), *Fundamentals of Musical Composition* (1948) and *Style and Idea* (1950).

[12] Arnold Schoenberg, *Structural Functions of Harmony*. Revised edition with corrections, edited by Leonard Stein, New York, W. W. Norton & Company, 1969, 20.

[13] Frank Lehmann is an assistant professor of music at Tufts University in Massachusetts, United States. His research focuses on chromaticism and transformational, neo-Riemannian approaches to the analysis of 19th-century music and film music.

Terzgleicher very extensively, says that the triad sharing the same third, especially in the case of Karg-Elert and Schoenberg, "not only arises from the mediant but also expresses the mediant *function*".[14] Since the transformations equally apply to the keys whose tonics would be all the triads represented in successions, a specific "tonal multivalence" is formed, as Lehman points out, through which an understanding of the shared third relations is achieved, and which – more importantly – can serve as a construct for the interpretation of the different ways in which this relation can be *heard*.[15]

American theorist David Lewin[16] names triad sharing the same third relation SLIDE operation.[17] It is actually a descriptive term for the aforementioned characteristic chromatic movement of chord fifths a half step up or down, while simultaneously maintaining the shared third, which indeed sounds like a specific tonal "slide". Taking it as a very convenient illustrative formulation for this phenomenon, Frank Lehmann elaborated the SLIDE relation in particular depth.[18] In addition to an exhaustive and highly systematic overview of the theoretical literature on triad sharing the same third relations, Lehmann proposes a set of functional paradigms by which this relationship can be understood in the context of Romantic harmony as a whole. Lehmann formulates the SLIDE relationship in a very similar way to Luin: "SLIDE is defined as a unique relationship of consonant triads in which the third is preserved, while the fifth is shifted by a semi-step, with a change in tonal types in the process."[19] He points to a significant theoretical dialectic regarding triads sharing the same third, from which a dilemma arises that has remained almost unresolved to this day about the way in which this relation entered the life of a composition: are triads sharing the same third more the result of a "unique inner quality", that is, some purely sonic event in itself (Ernst Kurth insisted on this), or do they arise from a predetermined tonal scheme within which they are given a very specific place?[20] In Schubert's (F.

[14] Frank Lehman, op. cit., 75.

[15] Ibid., 73.

[16] Cf. David Lewin was an American music theorist, music critic, and composer. His fields of interest included formal or mathematically based music theory, interpretive analysis of the relationship between music and text, and discussions of the methodology and purpose of contemporary music theory.

[17] See. David Lewin, *Generalized Musical Intervals and Transformations*, New Haven, Yale University Press, 1987. Repr. New York, Oxford University Press, 2007, 178, 227.

[18] Cf. Frank Lehman, op. cit.

[19] Ibid., 63.

[20] Ibid., 64.

Schubert, 1797–1828) tonal style, two of the most significant connections of triads sharing the same third can be found, which the author calls SLIDE axes: "the alternation of the major tonic and the minor Neapolitan chord or the major dominant and the low minor submediant" (see Example 3, t. 1–2 and 11–12, as well as Example 5, t. 13–14).[21]

Interpretation of Terzgleicher *in Russian literature*

The issue of triads sharing the same third is likewise discussed in the seminal papers of the Russian theoretical school, albeit not always receiving equal attention. A. N. Dolzhansky (1908–1966), Lev Mazel, and Yuri Kholopov are among the scholars who have addressed this issue. While their works also mention the occurrence of these chord progressions in the music of Ludwig van Beethoven (1770–1827) and the early Romantics, particularly Franz Schubert (1797–1828), it is evident that these authors base a significant portion of their discussions on the music of Russian composers, primarily Dmitry Shostakovich (1906–1975) (as in the case of Dolzhansky). They likewise deviate noticeably from the Riemannian and neo-Riemannian approaches to the interpretation of triads sharing the same third. Kholopov's theoretical assertion of shared third relations can be viewed as more sophisticated than Mazel's, as indicated by his critique of Mazel's approach, which interprets shared third keys as eponymous or "same-height" (Mazel's term).[22] Kholopov contends that shared third-degree keys, precisely because they originate on different tones (whether notated as diatonic or chromatic semitones), cannot have the same name or pitch.[23] In most of his works, he discusses the triads sharing the same third in only a few sentences, but in his textbook *Гармония – теоретический курс* (engl. *Harmony – Theoretical Course*) (2003) he devoted a separate six-page subchapter to them, entitled "triads sharing the same third relation".

According to Kholopov, the tonic was the first to acquire this harmonic relation historically: "In the 19th century, the development of a particular functional relation to tonic began – the shared third relation."[24] Referring also

[21] Ibid., 87.

[22] Л. Мазель, *Статьи по теории и анализу музыки* ("Об однотерцовых тональностях"), Москва, Советский композитор, 1982. Cited in: Юрий Н. Холопов, *Гармония – теоретический курс...*, op. cit., 438.

[23] Cf. Юрий Н. Холопов, ibid.

[24] Ibid., 436.

to Schubert's compositions, Kholopov primarily sees Beethoven's oeuvre from the same period, at the beginning of the 19th century, as the place where the *Terzgleicher* was initiated: "The merit of the essential introduction of shared third relations to the tonic as a special harmonic agent belongs to Beethoven."[25] It is important to note that Kholopov perceives the functional relationship between the tonic and its triad sharing the same third in two basic ways. These two ways refer to either the existence or the non-existence of the possibility for these two triads to be united in the same tonic function. Thus, "within the framework of the Classical-Romantic harmony of Beethoven, Chopin, Liszt, Glinka, Mussorgsky, the unification of triads sharing the same third in a tonic function (...) is impossible".[26] In these situations, Kholopov interprets the triad that shares a shared third with tonic as a kind of substitute for the tonic triad itself. He refers to a whole series of symbolic and unusual names to describe the first occurrences of this chord in Beethoven's music. For example, he calls it *mnimotonic*, *the replacement of the tonic* or *the spirit of the tonic* and *the playful tonic doppelganger*.[27]

In more recent music, that of the first half of the 20th century, however, the triad sharing the same third tonic can be considered its derivative. Consequently, it can be included in the same function in a broader sense, but, as Kholopov points out, "only if a sharp dissonance is allowed as the central chord of the system, according to the laws of the new harmony of the 20th century"[28]. As examples, the author cites Sergey Prokofiev's (1891–1953) "Vision Fugitive" No. 4 and, in his earlier work, the theme of the Finale of Shostakovich's Piano Sonata No. 2 in B minor. In the latter, the triads B-D-F# and B♭-D-F are interpreted by Kholopov as "two diatonic tonics", with an emphasis on the "dark-gloomy coloring" conveyed by this harmonic progression.[29]

Interpretation of Terzgleicher *in Serbian university literature on harmony*

In his book *Harmonic Analysis*, Dejan Despić defines the triads sharing the same third relation as one formed by "a major and minor triad sharing the

---

[25] Ibid., 439.

[26] Ibid., 438. See also Юрий Н. Холопов, *Гармония – практический курс. Часть II – Гармония XX века*. Второе издание, Москва, Издательский дом "Композитор", 2005, 23–24.

[27] Юрий Н. Холопов, *Гармония – теоретический курс...*, op. cit., 439.

[28] Ibid., 438.

[29] Юрий Холопов, *Очерки современной гармонии*, Москва, Музыка, 1974, 63.

same third". He adds that the existence of this shared third "is based on the possibility that they are relatively easy and logically connected".[30] The specificity of Despić's approach to explaining these triads is reflected in his interpretation of them as the result of various types of mode permeation, particularly through the permeation of harmonic types of relative keys (harmonic major and its relative harmonic minor). While this viewpoint exists in Russian theoretical literature, it is Despić who provided a determined definition of it. According to Dejan Despić, "(…) relative scales in their natural form contain an identical harmonic collection, so the impact of permeation between them can practically *only be felt when specific triads from the harmonic or melodic form of scales are compared* – primarily *the minor subdominant of the major and the major dominant of the mino*r (emphasis in original)". Despić emphasizes an important aspect of their relationship – their distinct unrelatedness. He provides a practical explanation that deviates from his interpretations of shared third chord relations, primarily following the path of second dominants and subdominants: "Although they are quite unrelated to each other, they can stand side by side; from the point of view of major, such a progression is interpreted as iv–V/vi, and from the point of view of minor as iv/III–V."[31] In this case, the shared third is enharmonically spelled. The key difference from the Anglo-Saxon theory, i.e., the Riemannian/neo-Riemannian, Schoenberg, and to a large extent the Karg-Elert theory, is that Despić prefers to use the secondary functions over the mediant logic of the altered chord in a shared third pair, which the others mentioned tend to use.[32]

Serbian University Literature on Solfeggio and Solfeggio Teaching Methodology

In Serbia, *Terzgleicher* triads are primarily taught theoretically in the subject of Harmony with Harmonic Analysis at the undergraduate level (which, considering the complexity of the notions, seems like an appropriate time). How-

[30] Dejan Despić, *Harmonska analiza*, Beograd, Univerzitet umetnosti, 1987, 222.

[31] Ibid., 222.

[32] In his later book *Harmony with Harmonic Analysis*, the author further emphasizes the specificity of this chord relationship, now pointing to the name of the chord connection, which was omitted in the previous book: "These two chords are in a very peculiar relationship of the minor and major triad with the (enharmonic) shared third, and hence they are called triads with a shared third (German: *Terzgleicher*)". (Dejan Despić, *Harmonija sa harmonskom analizom*, Beograd, Zavod za udžbenike i nastavna sredstva, 2002, 150–151)

ever, when it comes to the literature on solfeggio and the solfeggio teaching methods at the higher education level, triads sharing the same third are mentioned in one publication only related to solfeggio. Occasionally they can be seen in the scores and sensed, that is, experienced on an unconscious level, but there is no theoretical explanation that would be conducive to creating a complete, conscious representation of them within the cognitively organized musical hearing that we strive for throughout the entire process of music education.[33]

The only book that explicitly mentions *Terzgleicher* is *Solfeggio Through the Styles of the 19th and 20th Centuries, Part I* by Ana Olujić and Vesna Kršić Sekulić. Harmonic analyses of all segments (mostly melodies) were performed by Mirjana Živković, professor of harmony at the Faculty of Music in Belgrade.[34] In analyzing an excerpt from the song *Mischief* for voice and piano by Modest Mussorgsky (1839–1881), Mirjana Živković detected several *Terzgleicher* relations. In the aforementioned Mussorgsky's song, there is a modulation from D minor to the third-sharing D flat major at the beginning. Later, the music from C major (with the lowered sixth scale degree) modulates into the key with a shared third – C sharp minor[35] (Example 7).

Additionally, in an excerpt from the opera *The Golden Cockerel* (Act I) by Nikolai Rimsky-Korsakov (1844–1908), a triad sharing the same third with dominant triad appears in the alto section. Mirjana Živković noted the following: "In the central part of the excerpt, the permeation of F minor and F major, expanded by the appearance of minor mediants; m. 7 and m. 11 the triad C#–E–G# is an enharmonically spelled submediant D♭–F♭–A♭ and can be interpreted as a triad sharing the same third with dominant chord."[36] (Example 8)

---

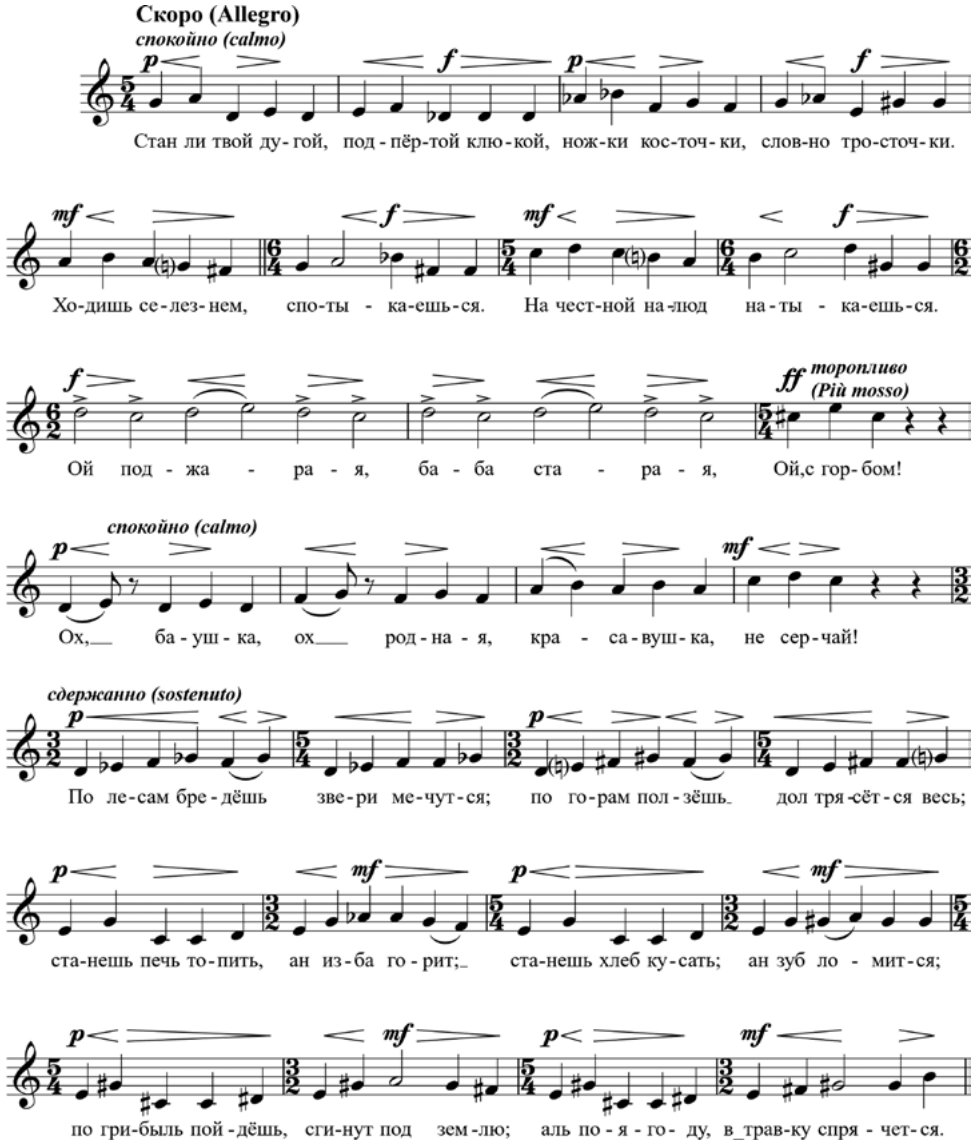
[33] Cf. Имина Алиева, "Когнитивно организованный и интуитивно-эмпирический музыкальный слух", *Введение понятий и диалектика связи. Международный музыкальный культурологический журнал*, 10, Баку, Harmony, 2011, http://harmony.musigi-dunya.az/RUS/archivereader.asp?s=1&txtid=486, accessed on 9/2/2024.

[34] Ana Olujić i Vesna Kršić Sekulić, *Solfeđo kroz stilove 19. i 20. veka – I deo*, Beograd, Fakultet muzičke umetnosti, 1999. Mirjana Živković presented concise harmonic analyses of all selected passages intended for solfeggio in this publication, having previously considered, for the sake of precision, the complete scores and not just the melodies presented in the book. However, Živković was not listed as a co-author of the book.

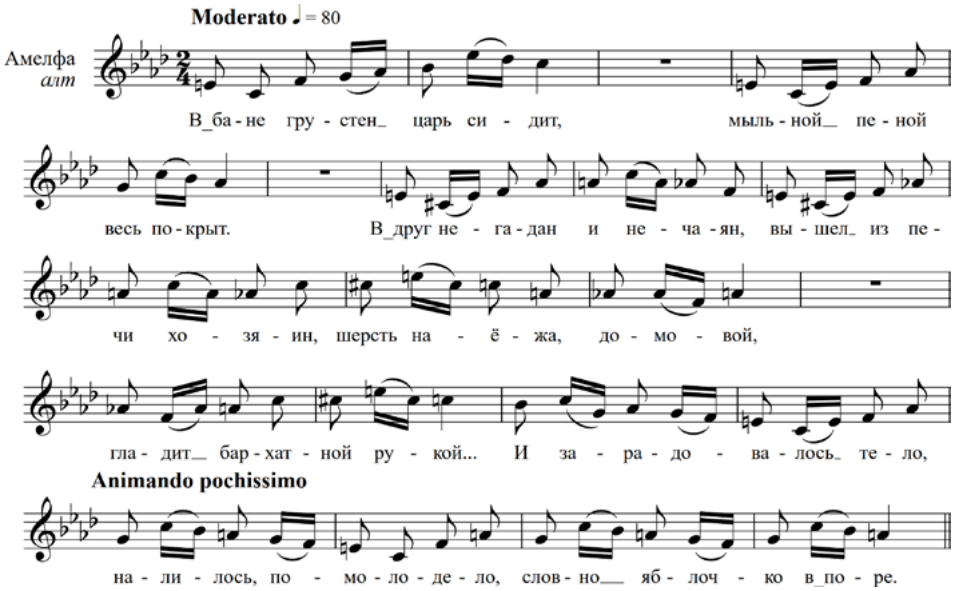
[35] See Ana Olujić and Vesna Kršić Sekulić, ibid., 109, 126.

[36] Ibid., 141.

Example 7. Part from the song for voice and piano *Mischief*



Example 8. Fragment from the opera *The Golden Cockerel* (Act I)



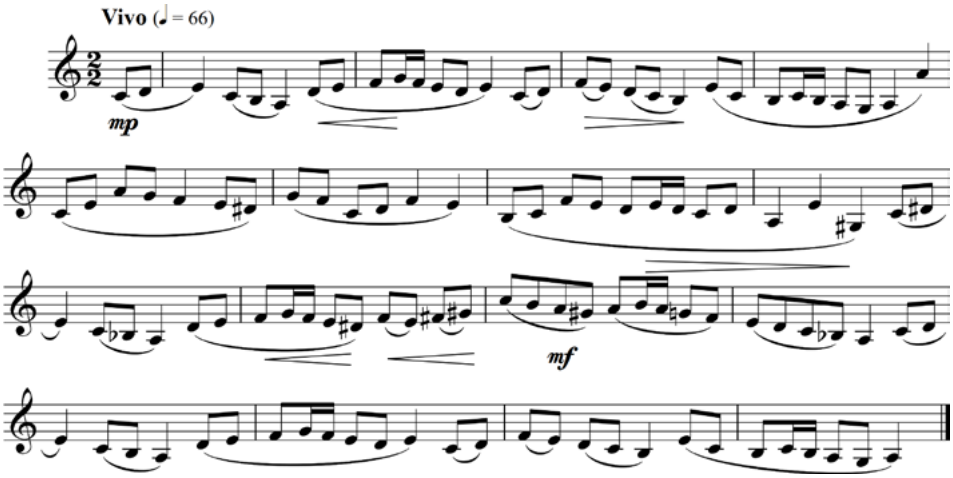
In the final year of learning solfeggio, it is possible to master some of the excerpts from this book, but before that, it is desirable to introduce students to the concept and sonority of third-sharing triads through less complex examples.[37]

Vesna Kršić Sekulić's manual *Intonation – Functional Ambiguity of Tones*[38] stands out for the grouping of original instructive melodies according to a common initial. The initial tone in these melodies shows functional ambiguity by appearing as the first, the fifth, or the third degree of major or minor keys. For example, if we take exercise no. 11 from this manual where the initial C is the third degree in A minor (Example 9a), and then immediately move on to exercise no. 16 where the initial C is the third in A flat major (Example 9b), students will have the impression of a *Terzgleicher* relation between the two keys.

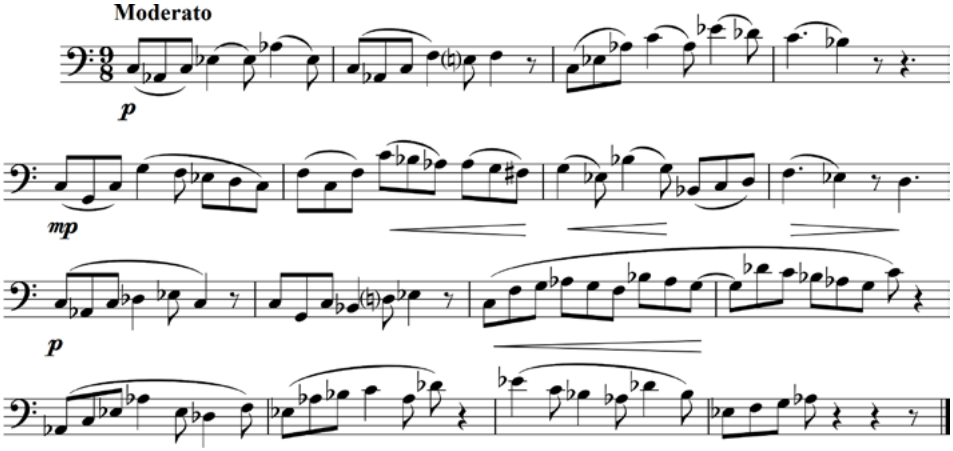
[37] Less complex examples will be presented in the aforementioned second paper, which is a continuation of this one.

[38] Весна Кршић Секулић, *Интонација – функционална многостраност тонова*, Београд, Факултет музичке уметности, 2003.

Example 9a. Example in A minor



Example 9b. Example in A-flat major



This book does not discuss simultaneous chord progressions nor mentions the term "triads sharing the same third". However, in the first footnote of the Preface, Kršić Sekulić emphasizes the importance of accurate intonation: "In the case of comparing the same tone as the third of different chords, the spacing of the major and minor thirds is very delicate in relation to the chromatically different fundamental tones of the major and minor keys."[39]

[39] Ibid., I–II.

In Dragana Jovanović's publication[40] which can be used both for teaching solfeggio and harmony, *Workbook in Harmony 1: Diatonics and Chromatics* (2009), various harmonic phenomena are discussed, but *Terzgleicher* is not mentioned. In the sequel, *Workbook in Harmony 2: Modulations*, [41] in Exercise 67, within the chapter dedicated to modulations into keys a minor second ascending, there is a noticeable *Terzgleicher* relation between the tonics of G major and A flat minor. These exercises, aimed at high school and university students, focus on playing, perception, analysis, and writing down the perceived content. Parallel treatment through different sensory modalities influences the creation of multimodal representations, which is beneficial for developing musical hearing. [42]

This was an overview of Serbian publications that can be used in solfeggio teaching. Nevertheless, when it comes to publications and articles related to solfeggio teaching methodology in Serbia, *Terzgleicher* have not been mentioned at all so far.

Russian Literature on Solfeggio and Solfeggio Teaching Methodology

Among the available foreign publications, some books in the Russian language offer melodies (excerpts) from classical pieces with *Terzgleicher* relations. Although the term *Terzgleicher* is not explicitly mentioned, Gleb Vinogradov's book contains the reproduction exercise of major and minor triads while retaining a common tone, which is the third.[43] Before the excerpt from Sergey Prokofiev's opera *Semyon Kotko* (Example 10b), Vinogradov provides two steps of preparation. Firstly, he offers non-rhythmic tonal sequences, including the juxtaposition of the two third-sharing triads: A–C–E and A♭–C–E♭ (Example 10a). Subsequently, as a second preparatory step, he introduces an instructional exercise demonstrating – like the original passage from the opera, shown afterward – an alternation (at a small distance) of the latent triad of A flat major and A minor (Example 10a continued). The preparatory

[40] Dragana Jovanović, *Praktikum iz harmonije 1. Dijatonika i alteracije*, Beograd, Fakultet muzičke umetnosti, 2009.

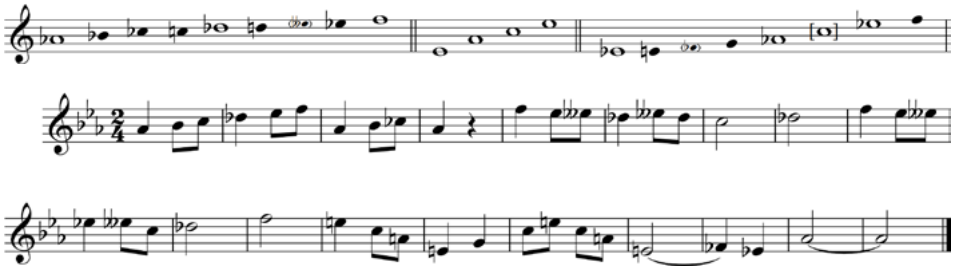
[41] Dragana Jovanović, *Praktikum iz harmonije 2. Modulacije*, Beograd, Fakultet muzičke umetnosti, 2009.

[42] Jelena Beočanin, "Multimodalne predstave i multimodalni pristup u nastavi solfeđa", *Muzika*, 2, 2017, 66.

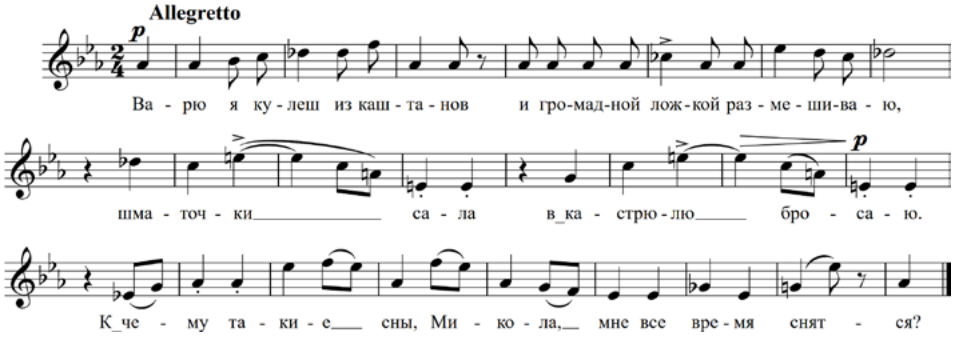
[43] Cf. Глеб Серафимович Виноградов, *Интонационные трудности – пособие по курсу сольфеджио для высших муз. учебных заведений*, Киев, Музична Україна, 1977, 22.

exercise provides an outline of the melody of the excerpt. Vinogradov suggested that exercises (pertaining to all the contents of this book) should always begin with a careful and detailed analysis of the melody, during which its basic compositional features, degree of complexity and defined methods of thoughtful vocal reproduction must be clarified.

Example 10a. Preparatory exercises for a fragment from the opera *Semyon Kotko*



Example 10b. Fragment from the opera *Semyon Kotko*



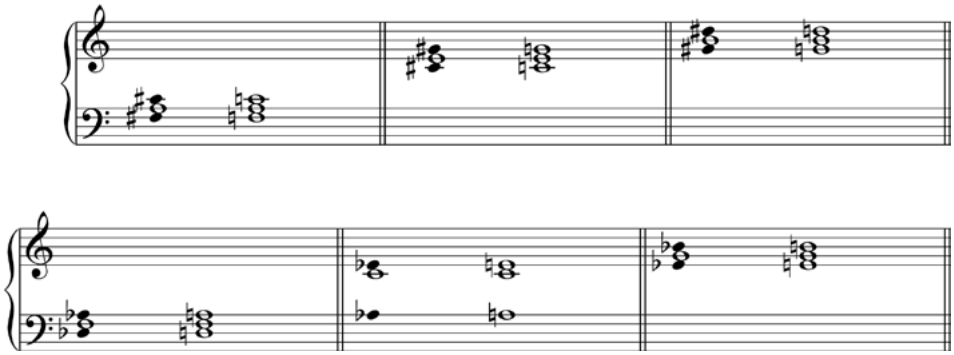
The difficulties are related to auditory inertia, and we can plan ways to overcome it, according to Vinogradov, using *a tonality scheme* that models the most significant intratonal relationships.[44] For the same purpose, preparatory melodic exercises are used to break auditory inertia and thereby create a new intonational foundation. "The exercise forms the necessary functional relationships, and auditory adaptation to the intonation complex of the example itself occurs."[45]

[44] Cf. ibid., 4.
[45] Ibid., 4.

The presented methodological procedure of Vinogradov seems fine. He facilitated the intonational analysis of the passage by highlighting the arpeggiated chords A♭-D♭-F, E-A-C-E and E♭-A♭-C-E♭ with whole notes, as a sound foundation, while the other tones were notated with quarter note heads as a kind of crossover. In the first stage of preparation for singing the instructional exercise, and then the fragment from the opera, it would be desirable to fully activate the intonational-auditory alertness of the students without harmonic support, and in the next stage (when the correct intonation is completely or mostly ensured), to add a full chord sound. Average groups in terms of capability would probably make mistakes in performing the whole and would need to work on phrases; highly capable groups would perform the entire progression precisely.

In one of his textbooks, Aaron Lvovich Ostrovsky included technical exercises of various types, among which there are those with *Terzgleicher* relations. He stated that these are groups of chord progressions from the contemporary harmony textbook by F. Reuter.[46] Example 11a shows the third-sharing triads lined up in the sequence of fifths, as presented by Ostrovsky. They can be sung in unison – alternating ascending and descending.

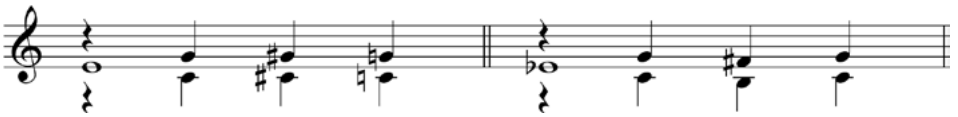
Example 11a. Third-sharing triads lined up in the sequence of fifths



Ostrovsky pointed out that the simultaneous performance of *Terzgleicher* with their common thirds coming first is preferable to their arpeggiation (Example 11b).

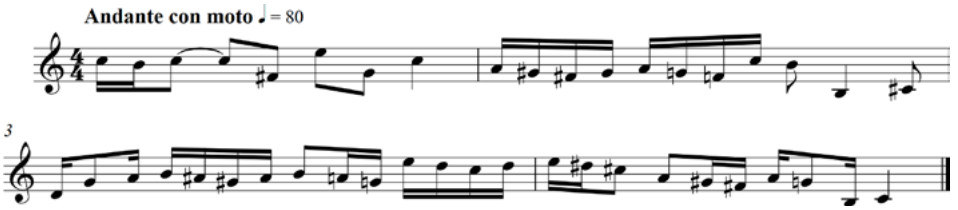
[46] F. Reuter, *Praktische Harmonik des 20. Jahrhunderts*, Halle, 1952. Cf. Арон Львович Островский, *Учебник солъфеджио* – вып. III, Ленинград, Музыка, 1974, 182.

Example 11b. Simultaneous performance of third-sharing triads



Yuri Nikolaevich Bychkov published a book titled *Monophonic Dictations*,[47] which focuses on different aspects of scale-tonal organization. One of the chapters is entitled "Shared third relations". This chapter includes eight monophonic dictations that showcase *Terzgleicher* relations between chords and *Terzgleicher* relations between keys. Bychkov suggested the following: "Students must develop a particular sense of functional congruence of multiple pitch elements, switching from one pitch to another must be accomplished through the rethinking of the function of the third".[48] The easiest dictation for students in this chapter is the one shown in the following example (Example 12) in which the latent *Terzgleicher* relations are felt*:* F#–A–C#/ F–A–C (m. 2), G#–B–D#/ G–B–D (m. 3), and C–E–G/ C#–E–G# (mm. 3–4).

Example 12. Dictation no. 77 from the collection *Monophonic Dictations* by Y. Bychkov



When listening to these motifs written in the same positions on the staff, but with chromatic differences, a student should be able to distinguish the difference between a half-step and a whole-step movement in melodic motion (A–G# within the triad F#–A–C# vs. A–G within the third-sharing triad F–A–C; B–A# within the triad G#–B–D# vs. B–A within the third-sharing triad G–B–D; E–D within the triad C–E–G vs. E–D# within the third-sharing triad C#–E–G#). Bychkov interprets *Terzgleicher* as multiple pitch vari-

[47] Юрий Николаевич Бычков, *Одноголосные диктанты. Пособие по курсу сольфеджио для учащихся музыкальных училищ и вузов*, Москва, Изд. РАМ им. Гнесиных, 1996. http://yuri317.narod.ru/d1/metod.htm; accessed on 15/2/2024.

[48] Ibid.

ants of subdominant, dominant, and tonic.[49] In the introductory part of his manual, the author provided detailed instructions on working with different types of scale-tonal organization in contemporary music as a part of solfeggio teaching. Among other things, he indicated the following: "In order to master mediant and third-sharing relations, an important role is played by the use of a common tone, or a tone that shifts (...). This methodical technique, which relies on the phenomenon of functional variability, is essentially universal."[50] He then stated that "mastering third-sharing relations enables the transition to a new stage in the development of tonal hearing – the study of leading tone harmonic relationships as a specific aspect of contemporary chromatic tonality (...)".[51]

Conclusion

Due to their specific sonority, *Terzgleicher*, or triads sharing the same third, constitute an exceptional harmonic phenomenon, and represent one of the elements of chords existing since the 19th century that should be mastered in order to enrich the musical hearing of students. This paper forms a theoretical basis for mastering *Terzgleicher* in higher education. This is the first part of an extensive interdisciplinary research into the concept and phenomenon of triad sharing the same third relations and the possibilities of their application in teaching – from the point of view of the science of harmony and solfeggio teaching methodology – in an effort to provide future music students, who are developing into music professionals of various profiles, with this unusual sound phenomenon. The paper contains an Introduction and the chapters "The Concept and Basic Characteristics of Triads Sharing the Same Third Relations", "*Terzgleicher* in the Harmonic-Analytical Literature", "Serbian University Literature on Solfeggio and Solfeggio Teaching Methods" and "Russian Literature on Solfeggio and Solfeggio Teaching Methods".

[49] Earlier in the paper, it was mentioned that Yuri Nikolaevich Kholopov did not support the theory that triads sharing the same third can be treated as functional equivalents. "It is inadmissible to regard the shared third relation harmony as an 'extension' of the function of the tonic of C major, regardless of the apparently existing similarity of C and C sharp. In the key of C major, the root C sharp appears to be very unstable, yet extremely far from the tonal center. During the resolution to the tonic, the C sharp functions as the upper leading tone to ii (...)" (Holopov, *Гармония – практический курс...*, 24).

[50] Юрий Николаевич Бычков, *Одноголосные диктанты...*, op. cit., 10.

[51] Ibid.

Moreover, the chapter "*Terzgleicher* in Harmonic-Analytical Literature" contains the following subchapters: "Interpretation of triads sharing the same third in German literature", "Interpretation of triads sharing the same third in American literature (neo-Riemannian school)", "Interpretation of triads sharing the same third in Russian literature" and "Interpretation of triads sharing the same third in Serbian university literature on harmony".

Judging by the appropriate analysis, it turned out that the literature in the field of harmony considered *Terzgleicher* in various ways, from neo-Riemannian transformational logic to a functional, mediant-secondary approach, relying on various instances of this chord relation in romantic and 20th and 21st century harmony. A contribution to these considerations is also given in this paper through an original proposal for a functional-analytical interpretation of all possible *Terzgleicher* relationships within a major and/or minor key. The essence of this proposal is in the review of all potential *Terzgleicher* relationships, presented within four musical examples, which does not exist in the available Serbian and foreign literature.

In both Serbian and Russian textbooks on solfeggio, the approach to *Terzgleicher* relies on artistic literature, with only lapidary methodological guidelines for mastering these chords. Namely, an analysis of Serbian literature on solfeggio and solfeggio teaching methodology has shown that *Terzgleicher*, as a theoretical concept and sound phenomenon, appear only in the book *Solfeggio Through the Styles of the 19th and 20th Centuries, Part I* by Ana Olujić and Vesna Kršić Sekulić, whose significant collaborator was the harmony professor Mirjana Živković. Even there, *Terzgleicher* are not explicitly presented – only two melodies are given – excerpts from the work of two Russian composers and a theoretical analysis of these melodies. Furthermore, a methodological approach to working on *Terzgleicher*, which follows the didactic principle from easier to more difficult, has not been presented in any Serbian publication. This emphasizes the need to fill the existing gap. From the presented overview of the available Russian literature, it can be determined that there are (again rare) publications on solfeggio and publications on solfeggio teaching methodology in which *Terzgleicher* appear, including a presentation of a possible methodological approach and theoretical interpretation, so that they can serve as a model to some extent when formulating our approach.

The summary overview of the approach to triad sharing the same third relations in solfeggio and harmonic literature presented in this paper has provided the fundamentals for the future correlation of solfeggio and har-

mony in the field of various forms of analysis, interpretation, and diverse applications of these chords in teaching practice. Thereby, a kind of interdisciplinary approach to the phenomenon of triads sharing the same third has been created, opening the possibility of forming a new methodological approach to mastering and adopting this material.

Works Cited

Алиева, Имина: "Когнитивно организованный и интуитивно-эмпирический музыкальный слух", *Введение понятий и диалектика везе. Международный музыкальный культурологический журнал,* 10, Баку: Harmony, 2011. http://harmony.musigi-dunya.az/RUS/archivereader.asp?s=1&txtid=486, accessed on 9/2/2024.

Beočanin, Jelena: "Multimodalne predstave i multimodalni pristup u nastavi solfeđa", *Muzika*, 2, 2017, 55–68.

Бычков, Юрий Николаевич: *Одноголосные диктанты. Пособие по курсу сольфеджио для учащихся музыкальных училищ и вузов*. Москва: Изд. РАМ им. Гнесиных, 1996, http://yuri317.narod.ru/d1/metod.htm, accesed on 15/2/2024.

Виноградов, Глеб Серафимович: *Интонационные трудности – пособие по курсу сольфеджио для высшых муз. учебных заведений*. Киев: Музична Україна, 1977.

Despić, Dejan: *Harmonska analiza*. Beograd: Univerzitet umetnosti, 1987.

Despić, Dejan: *Harmonija sa harmonskom analizom*. Beograd: Zavod za udžbenike i nastavna sredstva, 2002.

Engebretsen, Nora: "Neo-Riemannian Perspectives on the *Harmonieschritte*, with a Translation of Riemann's *Systematik der Harmonieschritte*", in: Edward Gollin and Alexander Rehding (Eds.), *The Oxford Handbook of Neo-Riemannian Music Theories*. New York: Oxford University Press, 2011, 351–381.

Jovanović, Dragana: *Praktikum iz harmonije 1. Dijatonika i alteracije.* Beograd: Fakultet muzičke umetnosti, 2009.

Jovanović, Dragana: *Praktikum iz harmonije 2. Modulacije.* Beograd: Fakultet muzičke umetnosti, 2009.

Кршић Секулић, Весна: *Интонација – функционална многостраност тонова*. Београд: Факултет музичке уметности, 2003.

Lehman, Frank: „Schubert's SLIDEs: Tonal (Non-)Integration of a Paradoxical Transformation", *Music Theory & Analysis – International Journal of the Dutch-Flemish Society for Music Theory,* Vol. 1, Nrs. 1 & 2, 2014, 61–100, http://dx.doi.org/10.11116/MTA.1.4, accesed on 14/2/2023.

Lewin, David: *Generalized Musical Intervals and Transformations*. New Haven: Yale University Press, 1987. Repr. New York: Oxford University Press, 2007.

Olujić, Ana i Vesna Kršić Sekulić: *Solfeđo kroz stilove 19. i 20. veka – I deo*. Beograd: Fakultet muzičke umetnosti, 1999.

Островский, Арон Львович: *Учебник солъфеджио – вып. III*. Ленинград: Музыка, 1974.

Schoenberg, Arnold: *Structural Functions of Harmony*. Revised edition with corrections, edited by Leonard Stein. New York: W. W. Norton & Company, 1969.

Холопов, Юрий: *Очерки современной гармонии*. Москва: Музыка, 1974.

Холопов, Юрий Н.: *Гармония – теоретический курс. Учебник – издание второе, исправленное*. Санкт-Петербург – Москва – Краснодар: Лань – Планета музыки, 2003.

Холопов, Юрий Н.: *Гармония – практический курс. Часть II – Гармония XX века*. Второе издание. Москва: Издательский дом "Композитор", 2005.

Summary

A shared third relation is formed between major and minor triads sharing the same third. They are called third-sharing triads or *Terzgleicher*. Although these chord progressions attract attention with their specific sonority, no consistently elaborated and systematized material would deal with this issue in the textbook literature on solfeggio and music theory. This paper represents the first part of a comprehensive research project. It provides an overview and critical review of the seminal textbooks and theoretical literature on harmony and solfeggio. The focus is on shared third relations, intending to establish a comprehensive and systematic theory of triads sharing the same third in Serbian music science.

In Western music theory, *Terzgleicher* has been considered in various ways. This started with the transformational logic of chord connection. The shared third relation is established through the "system of harmonic steps", which was represented by Hugo Riemann and then representatives of the neo-Riemannian followers in the music theory field, through chromatic mediant relationships between triads, by which a triad sharing the same third is reached. This concept is presented in the theoretical works of Sigfried Karg-Elert, Arnold Schoenberg, and Frank Lehman. Furthermore, it extends to the formation of a specific model of "SLIDE-relation" and "tonal multivalence", which are proposed by David Lewin and Lehman as the most optimal approaches to understanding *Terzgleicher*. In the Russian theoretical school, a more significant review of triad sharing the same third was made by Yuri Kholopov, who spoke of triad sharing the same third as a specific phenomenon, but not as a chord that can have the function of a tonic. Among Serbian authors of harmony textbooks, only Dejan Despić has mentioned the theory of triads sharing the same third, emphasizing, unlike Western theoreticians, the extra tonal nature of these chord relationships.

In Serbian solfeggio literature, the concept of triads sharing the same third is covered even more scarcely. *Terzgleicher* is mentioned only in one book – *Solfeggio Through the Styles of the 19th and 20th centuries, Part I* by the authors Ana Olujić and Vesna Kršić Sekulić. The two melodies shown from (Russian) artistic literature are not accompanied by comprehensive methodical instructions or preparatory exercises.

Russian authors Gleb Vinogradov, Aron Ostrovsky, and Yuri Bychkov contributed to the treatment of triads sharing the same third. Yuri Bychkov devoted a whole chapter of his manual *Monophonic Dictations* to these triadic relations, understanding them as multiple pitch variants of the three main degree triads.

As one of the forms of systematization of knowledge about triads sharing the same third, this paper has presented and functionally explained all the relationships between altered and diatonic triad sharing the same third relation.

The correlation of solfeggio and harmony in the context of triads sharing the same third, explored in the present paper, establishes the foundation for various forms of analysis, interpretation, and solfeggio-specific interpretation of these triadic relations. This exploration has significant potential for enhancing harmonic hearing. Including triads sharing the same third relations as an essential element in the process of enriching the harmonic ear of music professionals will be the focus of the second part of this research, which will be presented in the next paper.